

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in this application:

Listing of Claims:

Claims 1-37. (cancelled)

Claim 38. (new) A method of producing a transgenic solanaceous plant, wherein cells of the solanaceous plant have within their genome a chimeric gene, the expression of which gene causes plant cell cytotoxicity by ribosome inactivation at a desired target site within the plant body, comprising transforming plant cells with a chimeric gene comprising (i) a promoter, which promoter is induced at and/or adjacent to the target site, operably linked to (ii) a nucleic acid molecule which encodes a protein having type 3 ribosome inactivating activity.

Claim 39. (new) A method of producing a transgenic plant according to claim 38, wherein the protein having type 3 ribosome inactivating activity is a mature maize ribosome inactivating protein comprising an α domain and a β domain arranged contiguously.

Claim 40. (new) A method of producing a transformed plant according to claim 38 or 39, wherein the nucleic acid molecule comprises SEQ. ID. No.: 2.

Claim 41. (new) A method of producing a transformed plant according to claim 38, wherein the nucleic acid molecule has at least 70% identity with SEQ. ID No.: 2.

Claim 42. (new) A method of producing a transformed plant according to claim 38 wherein the nucleic acid has at least 80% identity with SEQ. ID. No.: 2.

Claim 43. (new) A method of producing a transformed plant according to claim 38, wherein the nucleic acid has at least 85% identity with SEQ. ID. No.: 2.

Claim 44. (new) A method of producing a transformed plant according to claim 38, wherein the nucleic acid has at least 90% identity with SEQ. ID. No.: 2.

Claim 45. (new) A method of producing a transformed plant according to claim 38, wherein the nucleic acid binds under stringent hybridization conditions to the nucleic acid molecule of SEQ ID NO.:2.

Claim 46. (new) A method of producing a transformed plant according to claim 38, wherein said chimeric gene further comprises a 3' untranslated terminator sequence.

Claim 47. (new) A method of producing a transformed plant according to claim 45, wherein said 3' untranslated terminator sequence is from plant, bacterial or viral genes.

Claim 48. (new) A method of producing a transformed plant according to claim 46, wherein said 3' untranslated terminator sequence is selected from the group consisting of the pea rbcS E9 terminator sequence, the nos terminator sequence derived from the nopaline synthase gene of *Agrobacterium tumefaciens* and the 35S terminator sequence from cauliflower mosaic virus.

Claim 49. (new) A method of producing a transformed plant according to claim 38, wherein said chimeric gene further comprises a transcriptional or translational enhancer sequence intracellular targeting sequences and introns, or nucleotide sequences operable to facilitate the transformation process and stable expression of said chimeric gene or combinations thereof.

Claim 50. (new) A plant transformed with a chimeric gene according to the method of claim 38.

Claim 51. (new) A plant cell comprising within its genome a chimeric gene, the expression of which gene causes plant cytotoxicity, said chimeric gene comprising (i) a promoter, which promoter is induced at and/or adjacent to a target site, operably linked to (ii) a nucleic acid molecule which binds under stringent hybridization conditions to the nucleic acid molecule of SEQ ID NO.: 2 and encodes a protein having type 3 ribosome inactivating activity.

Claim 52. (new) A method of producing a transgenic solanaceous plant, comprising growing plants from a seed wherein said seeds have within their genome a chimeric gene, the expression of which gene causes plant cytotoxicity at a target site, said chimeric gene comprising (i) a promoter, which promoter is induced at and/or adjacent to a target site, operably linked to (ii) a nucleic acid molecule which binds under stringent hybridization conditions to the nucleic acid molecule of SEQ ID NO.: 2 and encodes a protein having type 3 ribosome inactivating activity.

Claim 53. (new) A nucleic acid molecule comprising a promoter, which promoter is induced at and/or adjacent to a target site, operably linked to a nucleic acid molecule which binds under stringent hybridization conditions to the nucleic acid molecule of SEQ ID NO.: 2 and encodes a protein having type 3 ribosome inactivating activity.

Claim 54. (new) A vector comprising the nucleic acid of claim 53.